

ANNUAL REPORT  
TO  
THE MEMBERS  
OF THE  
WILLENHALL  
*URBAN DISTRICT COUNCIL,*

BY  
JOHN T. HARTILL,

*L.R.C.P.L., M.R.C.S. Eng., J.P.,*

*MEDICAL OFFICER OF HEALTH,*

February 13th, 1911.

## Summary of Vital and Mortal Statistics for 1910.

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|      |     |     |     |     |     |     |              |
|------|-----|-----|-----|-----|-----|-----|--------------|
| Area | ... | ... | ... | ... | ... | ... | 1,249 acres. |
|------|-----|-----|-----|-----|-----|-----|--------------|

Population :—

|              |     |     |     |     |        |
|--------------|-----|-----|-----|-----|--------|
| Census, 1901 | ... | ... | ... | ... | 18,515 |
|--------------|-----|-----|-----|-----|--------|

|                 |     |     |     |     |        |
|-----------------|-----|-----|-----|-----|--------|
| Estimated, 1910 | ... | ... | ... | ... | 19,812 |
|-----------------|-----|-----|-----|-----|--------|

Number of Inhabited Houses :—

|              |    |     |     |     |       |
|--------------|----|-----|-----|-----|-------|
| Census, 1901 | .. | ... | ... | ... | 3,614 |
|--------------|----|-----|-----|-----|-------|

|                 |     |     |     |     |       |
|-----------------|-----|-----|-----|-----|-------|
| Estimated, 1910 | ... | ... | ... | ... | 3,859 |
|-----------------|-----|-----|-----|-----|-------|

|                                     |     |     |
|-------------------------------------|-----|-----|
| Average Number of Persons per House | ... | 5·1 |
|-------------------------------------|-----|-----|

|         |     |     |    |     |     |     |                |
|---------|-----|-----|----|-----|-----|-----|----------------|
| Density | ... | ... | .. | ... | ... | ... | 15·8 per acre. |
|---------|-----|-----|----|-----|-----|-----|----------------|

|        |     |     |     |     |     |     |     |
|--------|-----|-----|-----|-----|-----|-----|-----|
| Births | ... | ... | ... | ... | ... | ... | 557 |
|--------|-----|-----|-----|-----|-----|-----|-----|

|            |     |     |     |     |     |     |      |
|------------|-----|-----|-----|-----|-----|-----|------|
| Birth-rate | ... | ... | ... | ... | ... | ... | 28·1 |
|------------|-----|-----|-----|-----|-----|-----|------|

|        |     |     |     |     |     |     |     |
|--------|-----|-----|-----|-----|-----|-----|-----|
| Deaths | ... | ... | ... | ... | ... | ... | 205 |
|--------|-----|-----|-----|-----|-----|-----|-----|

|            |     |     |     |     |     |     |      |
|------------|-----|-----|-----|-----|-----|-----|------|
| Death-rate | ... | ... | ... | ... | ... | ... | 10·3 |
|------------|-----|-----|-----|-----|-----|-----|------|

|  |      |
|--|------|
| Net Death-rate including deaths outside District | 11·9 |
|--|------|

|                    |     |     |     |     |     |
|--------------------|-----|-----|-----|-----|-----|
| Zymotic Death-rate | ... | ... | ... | ... | 0·4 |
|--------------------|-----|-----|-----|-----|-----|

|   |       |
|---|-------|
| Infantile Mortality per 1,000 Births registered | 100·5 |
|---|-------|

# Medical Officer's Annual Report,

## 1910.

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MR. CHAIRMAN AND GENTLEMEN,

In this my 22nd Annual Report, I have the pleasure to record (1)—By far the lowest death-rate for many generations. (2)—A sickness rate more favourable than any in my long experience. (3)—The lowest death-rate from the principal infectious diseases since 1883, and probably the lowest ever recorded. (4)—By far the lowest infantile mortality since 1891, beyond which I have no record. (5)—A lower death-rate from Pulmonary Consumption than in any year since 1895; whilst the death-rate from all forms of Consumption was only slightly less on two occasions since 1889.

The District is situated in a shallow, upland valley, 400 to 445 feet above the sea level. The houses are built on maiden clay or clay mixed with gravel, or on excavated shale. The water supply, derived chiefly from an artesian well below sandstone formations, was plentiful, and on the whole satisfactory, though not always as clear as drinking water should be. The chief industries are the manufacture of locks, keys, bolts, and brass and iron castings; and in these, women and young persons are largely employed—also a few children. Better trade may have accounted for the greatly reduced number of deaths in public institutions beyond the District, as compared with the two preceding years.

Climatic conditions were more than usually favourable; fresh bracing winds with few storms; more than the usual amount of sunshine in the first and last quarters; no excessive cold; little fog;

comparative even-ness of temperature contributing to the non-production of chest diseases ; a cool summer keeping in check the germs productive of diarrhœal complaints ; and much above the average rain-fall, but with less than the average rain-storms, which effectually flushed the sewers and house-drains.

I estimate the population to be 19,812, living in 3,859 houses ; based upon an average of 5·1 to each house, as at the last Census ; and adding 131—the estimated proportion of inmates of the Union House—from the township.

There were 557 births and 205 deaths registered in the District, equal to a birth-rate of 28·1, and a death-rate of 10·3 per thousand per year ; as compared with an average of 32·5 and 16·3 in the ten preceding years. The birth-rate was the lowest, and the death-rate far and away the lowest of which I have any record. The death-rate from the seven principal infectious diseases was 0·4 ; as compared with an average of 2·2 in the ten preceding years. The net death-rate of all belonging to the District was 11·9 ; as compared with an average of 18·0 in the ten preceding years—that is to say, including those who died in public institutions beyond it.

Fifty-six children died in the District and two in outside institutions under a year old, equal to a rate of 100·5 or 104·1 per thousand births registered, according to whether the number of deaths be taken as 56 or 58 ; as compared with an average of 164·0 in the ten preceding years. Of the 58 deaths one was that of an illegitimate infant.

In my last two annual Reports, the subject of infantile mortality and its causes was fully discussed ; and the probable value of a well-trained female Health Visitor demonstrated. In commenting upon them, the County Medical Officer of Health, in his annual Report to the County Council for 1909, writes : “ In view of the persistently high infant mortality rate of Willenhall, it is difficult to understand why the District Council should hesitate for a moment in following the advice of their Medical Officer of Health regarding the adoption of the Notification of Births’ Act, and it is



to be hoped in his next annual Report he will be in a position to state that the Act has been adopted, and the necessary machinery provided for securing full advantage from it." So far as 1910 is concerned the chief causes of infantile mortality were Premature Birth and Debility from Birth; but in ordinary years summer Diarrhœa is the most fatal of all the diseases of infancy. All these cases require skilful management. Sometimes Premature Birth is due to the vicious habits of parents; but, in this town, much oftener to laborious work and poverty of the mother in the months preceding child-birth. Diarrhœa in fatal form is essentially a disease of bottle-fed children, brought about by germs which get into, and multiply in milk and other food. One of the chief causes of the marked decrease in the death-rate of older persons has been a steadily maintained and successful attempt to educate the public for more than a generation as to the means by which disease is fostered or avoided. It is believed that the principal reason why infant mortality has not materially decreased in the past 70 years is, that the means adopted have failed to teach mothers how to manage themselves during pregnancy, and their offspring in the early part of their lives. Various proposals to bring about this result have been made, such as the tuition in Elementary Schools of elder girls on the duties of motherhood and the management of children; but I have no faith whatever in arm-chair teaching of that sort, considering the age at which girls usually leave school here. Practical, sympathetic tuition *in the home* has been successfully tried in a few places; and to be generally successful must be begun at once and continued at any cost for a generation. A child prematurely born needs to be kept warmer and to have its food more diluted than one born at the full period. "Ignorance of the simple rules of feeding and neglect of them are the chief causes of gastric trouble," and consequent death from atrophy. An "infant who has to depend on artificial feeding is heavily handicapped in the struggle for existence." To sum up my remarks on this subject, (1)—The Council can do much to maintain purity of the water supply, and to keep the air in and around houses pure by continuous attention to drains, ashpits and accumulations of refuse; and by

using such legal powers as they possess towards securing wash-down water closets, and abolishing at the earliest practicable moment the conservancy system. (2)—The Council can help to educate mothers in the duties of mother-hood by appointing a suitably trained female Health Visitor, and by the distribution of leaflets, which I will gladly draw up ; but the terms in which I may draw them up will depend upon whether there is to be, or not to be, such a Visitor in the near future. (3)—The Government can help to secure purer, cleaner milk ; and I respectfully suggest a consideration as to whether it is or is not possible to secure cessation of labour in factories for two months *before child-birth*, and *a much more extended rest at home after child-birth* than the Factory Act provides for ; so that mothers may be at liberty to look after their *own* children *in their own homes*.

The cases of Infectious Disease certified were : Diphtheria 6, Erysipelas 13, Scarlet Fever 19, Enteric Fever 4, and under the Pulmonary Tuberculosis regulations, 7. Of non-notifiable Infectious Diseases there came to my knowledge :—Measles 4, Chicken Pox 145, Whooping Cough 8, Mumps 13, Diarrhœa 10, and Influenza 1. Of these, 2 died from Whooping Cough, 1 from Diphtheria, 1 from Influenza, 5 from Diarrhœa, and 4 from Pulmonary Consumption. None were removed to a Hospital, but probably some of the Consumptives got a modified open-air treatment at the Union House.

Leaflets containing practical advice were taken and explained to most of those in charge of cases of infectious disease, whether certifiable or not ; and on recovery or death of the sufferers, whenever needed, the bedrooms in certifiable cases were cleansed and disinfected, and the bedding taken to Bentley for disinfection by steam under pressure. In non-notifiable cases, it is rarely possible to secure satisfactory disinfection of house, clothing or bedding.

The cases of Diphtheria occurred at widely separated parts of the town, and at considerable intervals. No case had any known connection with any other case, and several cases were treated with anti-diphtheria serum injections. At one house defective

drains were found and soon put in order; whilst all the other houses were in good sanitary condition.

The cases of Scarlet Fever were fewer in number than in any year since 1889—except 1894, when there was one case less. The child of a Teacher at Portobello Schools—living outside the District—having contracted the disease, the Teacher was excluded from school for several weeks, and in due course the bedding and premises were disinfected to the satisfaction of the local M.O.H. A telephone operator living in the District contracted the ailment in another District. She was isolated, and all available means were taken to protect the public. Arrangements were made at the house of a vendor of sweets, for the nurse in attendance to have nothing to do with the shop. A certified midwife, living in an infected house, was advised to cease attending the lying-in for a period of six weeks.

There were four cases of Typhoid Fever in four different localities; the premises were in good sanitary order in two cases. Occupation probably favoured the production of the disease in one case, and defective drains were found and a remedy obtained in the other.

In May, a case of acute febrile disease, accompanied by sore throat, enlarged glands in the neck, a little exudation on the fauces, no rash and no desquamation of the skin, was reported to me; and as a matter of precaution I advised that children in the same house should be kept from school, pending enquiries. As no diphtheritic bacillus was found, and in many respects the symptoms pointed to some abnormal ailment, I wrote to the M.O.H. for Asfordby, where the child had been on a visit, and was informed by him that the village schools had been closed in consequence of the prevalence of an anomalous disease, believed to be infectious, with symptoms similar to the Willenhall case. The child got well, no fresh case was reported, and after a time the other children were permitted to return to school.

With regard to Measles, a child living in the Forge Yard was



reported as suffering from the disease on June 8th. The Teacher in the school he attended was advised to look at all the children in his class closely between the 11th and 17th, and to send home any found with symptoms of rash, sneezing or cold, until the nature of the ailment could be decided. About the 10th a child from Bilston was brought to live in a house near, and on the 24th he was attacked by Measles—but there was no other child of school age in the same house. The disease did not spread further, and the other cases reported were distant from these in point of time.

Though the cases of Chicken Pox were numerous, they caused little suffering.

The cases of Diarrhœa were unusually few, and all under 13 months old were either bottle-fed or fed partly from the breast and partly from the bottle.

As the result of conferences at Stafford between Medical Officers of Health and School Medical Officers, on the invitation of Dr. Reid, at which I was present, certain resolutions were passed designed to secure harmonious co-operation between the public health and education Authorities of the County. The result of those resolutions was, that the County Council Education Committee issued on January 1st, of this year, a circular to School Teachers on the notification of suspected infectious illness by Teachers to local Medical Officers of Health. In the main the directions in the circular are such as I have consistently advocated here for the past 16 years, and acted on as far as I was allowed; and they ought to make it impossible for circumstances to arise again, such as called forth the strong protests made in my last two annual reports.

The deaths from Pulmonary Consumption were 14 and from all forms of Consumption 23, equal to rates respectively of 7·0 and 11·5 per 10,000 persons living, expressed to the nearest half unit. Seven cases of Pulmonary Consumption were certified under the Board's Order of 1908—but there is no compulsion to certify any but Poor Law cases. The death rate from Pulmonary Consumption



was only four times lower since 1876, and from all forms of Consumption only six times. Satisfactory as this record is, much must be done in the future, before the disease can be stamped out. The leaflets prepared last year have again been circulated amongst the sufferers and their friends; and personal efforts have again been made to educate the public to protect themselves. After every death, the bed and body clothing were disinfected by the steam disinfecter, and the bedrooms occupied were also cleansed and disinfected. No Sanatorium has been provided; and the Council has not entered into any contract under powers conferred by the Public Health Act 1875.

About 3 cwt. of the lungs, pleuræ, thoracic and abdominal glands and adjacent parts of three well-fed beasts were condemned as unfit for food because they were tuberculous, and with the consent of the butchers, removed and cremated without any Magisterial Order being applied for. In compliance with the suggestions of the Local Government Order 1904, the flesh being healthy was not condemned.

In the summer private information was given me, that three emaciated cows, which were probably diseased, were coming to Willenhall. Two days later, I had reason to believe they had come, and that one of them had been killed. Enquiries were instituted and a search made, without any discovery of the animal. Nevertheless I was probably near it, and I have little doubt that the other beasts immediately disappeared, and that one of them was condemned elsewhere as unfit for food. Dogmatic assertions on a hypothetical case—necessarily unproven—are not of much value. Nevertheless, it is to be hoped that whenever facts warrant it, the Council will press for, and the local Magistrates inflict, the heaviest possible penalty allowed by law for the wilful exposure for sale of diseased meat.

Three hundred and twenty four lots of infected bedding were disinfected by steam under pressure, and 41 houses were otherwise disinfected.

In November, 1909, I made a Report to the Council that in my opinion Houses, Nos. 3 to 9 inclusive, in Court 1, Cannon Street, were unfit for human habitation and that they should not be re-occupied until put into good sanitary order, to the satisfaction of your Surveyor; and in April, 1910, I gave similar advice concerning Nos. 2, 4, 5 and 6, in Court 3, Wednesfield Road, and that No. 3, in the same Court, needed repairs; and in each case I advised the Council to take proceedings under bye-law 88 relating to buildings. No Formal Notice appears to have been served regarding these properties; but I gather that informal communications have been made with the owners. As regards Cannon Street, three of the houses condemned are at present occupied, and it may be that repairs of some sort have been done; but the property as a whole is in an unsatisfactory condition. As regards Wednesfield Road, the four houses condemned are not now tenanted, but there is a manure heap against the walls of No. 3 which has a tenant; and this must be a nuisance, not only to the occupiers of that house, but to the occupiers of other houses with frontage to Wednesfield Road. I think it now becomes my duty to refer the Council to section 17 of the Town Planning Act 1909, so that records may be made and kept of the condition of these properties; that closing orders may be issued for such parts of them as have not been put in order to the satisfaction of your Surveyor; and that such orders remain in force until formally determined by the Council itself.

Table 6 contains a summary of the work done by the Inspector of Nuisances. He reports that the sanitary conveniences have been kept in fairly good order, and that the Council's men have attended to the cesspits, ashpits and ash-bins, with regularity and frequency, and that the 8 Formal Notices not yet complied with, are likely to be soon.

Sixteen new houses were built, seven were demolished, and two belonging to the Council will not again be tenanted. Thirty-three privy-cesspits and 34 ashpits were abolished; 62 Water Closets and 32 Waste Water Closets, including 31 at Elementary Schools, were put in; 42 houses were connected with the sewers by 27

connections, and the new house drains were tested as usual by the Surveyor.

The sewers have been extended along Wednesfield Road as far as Moose Lane ; and the Wolverhampton Road to the District boundary in Stow Heath Lane ; and are being extended along Rose Hill and the Bilston Road. The scheme provides for a biological plant consisting of Detritus, Roughing, Septic and Upward-flow tanks, and 6 circular 90 feet filters. When completed the whole of the District will have sewers except Moose Lane and the extreme boundaries of outlying parts ; and it will be possible for about 170 houses already built to be connected with them. A Storm Sewer has also been put down to prevent flooding during heavy storms in the immediate neighbourhood of Frederick William Street.

Villiers Street and Stone Street made in 1909, were formally taken over by the Council. Lister Street—better known hitherto as Mount Pleasant—has been made, but not yet formally taken over. Improvements, by widening or otherwise, were made in Wednesfield Road beyond the Wagon and Horses Inn ; at the junction of Lower Lichfield Street with Doctor's Piece ; in the Market Place ; and of the Angel Hotel Passage to Upper Lichfield Street. Ann Street and Back Ann Street are about to be made under the Private Street Works Act 1892. School Street, Chapel Street, Forge Street and Bennett Street, have not yet been made in a manner to be taken over by the Council. One of the most dangerous horse and motor traffic corners in the town is at the point where Peel Street and Gomer Street join Wolverhampton Street—the traffic is heavy along the main street, which is very narrow ; and it is impossible to see what is coming along it, until well out of the two smaller streets.

Towards the close of the year I made a Report to the Council on the Regulations made in September by the Local Government Board as to the administration of the Housing and Town Planning Act 1909, and asked the Council to determine what inspections they desired to be made other than those now made, and in what form the Council desired the records to be made and kept. No official



communication has been made to me on the subject, but I understand the Inspector of Nuisances has inspected 108 houses and taken rough notes which as yet have not been transcribed to cards purchased for the purpose. In my Report I made it clear that a second I. O. Nuisances must be appointed to meet fully the requirements of this Act, unless the Council is satisfied that the work now being done satisfies the wishes of the Local Government Board, though short of the letter of the law. In the course of this year, whether another Inspector is or is not appointed, I will give the Act further consideration ; but I may say at once that I regard the card-record system as one which will consume the maximum of time and secure the minimum of beneficial result.

During the year 60 inspections of 55 of the smaller Factories, and 284 inspections of 215 Workshops were made, chiefly by the Sanitary Inspector—resulting in the lime-washing of 17 Workshops, and abatement of 7 nuisances. Two more nuisances are likely to be abated soon. One communication was received from H. M. I. of Factories regarding additional W. C. accommodation, but the premises have been practically abandoned so far as the employment of labour is concerned, and further accommodation is not now necessary. The breaches of special sanitary requirements for bake-houses refer to tiled roofs which no one will lime-wash, instead of ceilings of plaster. Eighteen Out-workers Lists, showing employment of 131 persons, were received twice in the year ; and 14 Lists showing employment of 50 persons once only in the year. The addresses of 48 out-workers were sent to other Councils, and the addresses of 3 out-workers were received from other Councils ; 38 out-workers premises were inspected ; and there was no out-work in unwholesome premises, nor in infected premises. The Factory Abstract was posted up where-ever legally required. No case of lead poisoning amongst file cutters was reported. All the bake-houses were inspected twice ; and there is no under-ground bake-house in use.

No offensive trade within the meaning of section 112 of the Public Health Act 1875 is carried on, but many complaints were received of offensive nuisances arising from the frying of fish in

cotton seed or soya bean oils. Though this is not a nuisance dangerous to health, it is most objectionable to many people ; and during a part of the year, the production of the savoury tit-bits, which so many seem to enjoy, caused for several hours in the week a pollution of the air, especially in Walsall Street from Morfital Lane to Cross Street ; and from Walsall Street to Wood Street, across Hall Street, Lower Lichfield Street, Clemson Street, Union Street and Stafford Street. I do not know whether the Council can make any bye-laws which will mitigate or do away with the nuisance ; but, for the information of any private persons who care to take the matter up, I may say the High Court of Justice has granted Injunctions restraining defendants from allowing such noxious odours to escape to the injury of his neighbours' premises.

As regards enamellers of iron, a continuance of decidedly improved health has been maintained since the French Patent rights were acquired, though one slight case of lead colic occurred. The Bronzers of iron castings have voluntarily submitted to a quarterly medical examination. Their general health was decidedly good, and in no case was there the slightest trace of a lead line in the gums, or the slightest sign of disease due to the inhalation of lead dust.

As regards nuisance from smoke, since I first called attention to the subject in 1893, many dozens of gas engines and electric motors have been introduced which cannot fail to have diminished the amount of smoke in the air. Nevertheless, complaints are often made of the nuisance from that cause on the east side of the town, and justly ; and as no remedy was forthcoming, complaints having been made to the Local Government Board, I was requested by the Board to make another report on the subject. The powers of the Council are defined in section 91 of the Public Health Act 1875, sub-section 7, and to this there is appended an important proviso which limits the action of Summary Courts of Justice, and there is often a difficulty in deciding whether furnaces are or are not constructed "in such a manner as to consume as far as practicable.... all smoke arising therefrom." Private individuals may, if they



choose, apply for an injunction in the High Courts of Justice ; but even then there is sometimes a difficulty in getting what is applied for outside residential districts ; and it is an obvious injustice to artisan tenants to have to make such an application, because they have frequently neither the education, nor the means to enable them to proceed. I therefore suggested that experts connected with the L. G. B. should consider and determine whether it is or is not a fact, as Mr. H. E. Fletcher says, that “it may with confidence be asserted that consumers of coal in almost all kinds of furnaces have it now in their power to conform with the requirements of the Public Health Act and prevent the discharge of black smoke from their chimneys” and that too, with an enormous annual saving of money. Upon the answer to this enquiry being in the affirmative, I suggest that the law should be strengthened by the appointment of trained Engineering Inspectors with powers similar to those under the Alkali Act ; with power to compel furnaces to be built capable of consuming their own smoke ; to insist on efficient stoking and the use of a proper kind of coal ; *and above all to bring as much pressure as possible to have gas or electric power substituted for steam power, where-ever they can be suitably and economically used.* New bye-laws are needed, firstly, to secure much higher chimney stacks, and more complete combustion within the furnaces ; and secondly, to secure the building of annealing ovens on principles calculated to discharge as little smoke as possible, and *on sites not in close proximity to dwelling houses.*

All the Elementary Schools are supplied with tap water, and have been kept in good order—but I should like to get them scoured more frequently. The Medical inspection of the children is conducted by Officers of the County Council.

The supply of milk is chiefly from outside Districts. No provision has been made by the Council for the examination of milch cattle by a Veterinary Surgeon. No sample of milk was examined for the bacillus of tubercle.

The I. O. N. holds a meat inspector's certificate. There are 14 slaughter-houses, 13 occupied. They were inspected from time



to time, both at killing and other times. I am glad the Council finally refused to pass the plans presented for slaughter-houses in New Road and Walsall Road.

I advise the Council to make Ophthalmia neonatorum a certifiable disease under the Notification Act, and at the same time to make provision by contract to prevent as far as possible any newly-born child becoming permanently blind for want of proper medical attention in the first month of its life. Power is conferred in section 133 of the Public Health Act 1875.

With regard to the Midwives Act 1902 and the section which came into effect last year, there is no *trained* certified midwife in the District, and from enquiries made I fear the Act has rather caused inconvenience to the poor locally than been of benefit to them. By the Act certified midwives are required in certain cases to send for a Doctor, and having done so their responsibility ceases. The Act makes no provision for the payment of the Doctor, and the Doctor may refuse to go to the midwife's assistance. When Doctors do go, they often get no fee, rarely their whole fee. The Guardians have the power to pay the Doctor, but decline to do so. The attention of Parliament has been called to the matter, but the Statute law has not been amended. Will the Council consider the matter and under the same 133rd section of the P. H. A. get the consent of the Local Government Board to provide medical assistance in such cases, as Liverpool and Manchester have already done?

One hundred and thirty nine children were successfully vaccinated ; 287 exemption certificates were obtained ; the vaccination of 56 was postponed ; and 29 died without being vaccinated. This is a lamentable record, and a heavy penalty will some day be exacted, unless by good luck the first cases of Small Pox are speedily discovered and isolated in hospital.

Only 11 inmates of the Union House, from this District, have taken advantage of the newly provided pensions, and left the House.

There are no Common Lodging Houses in the District.

The Public Health Acts Amendment Act, 1907, has not been adopted, but I understand the Council are likely to adopt some parts of it.

All but two of the deaths were certified by Doctor or Coroner.

The Tables required to be filled up by the Local Government Board, the County Council and the Home Office will be forwarded, and are in substance appended hereto.

I am, Gentlemen,

Yours obediently,

JOHN T. HARTILL,

M. O. H.

Willenhall,

February 13th, 1911.



Table 1.

Vital Statistics for 1910 and Previous Years.

| YEAR.                        | Population estimated to Middle of each Year. | BIRTHS. |       | Total Deaths Registered in District |                               |              |       | Total Deaths in Public Institutions in the District. | Deaths of Non-residents regist'd. in Public Institutions in the District. | Deaths of Residents registered in Public Institutions beyond the District. | NET DEATHS AT ALL AGES BELONGING TO THE DISTRICT. |       |
|------------------------------|--|---------|-------|-------------------------------------|-------------------------------|--------------|-------|--|---|--|---|-------|
|                              |  | Number  | Rate* | UNDER ONE YEAR OF AGE               |                               | AT ALL AGES. |       |  |   |  | Num-ber.  | Rate* |
|                              |  |         |       | Number                              | Rate per 1000 Births regist'd | Number       | Rate* |  |   |  |   |       |
| 1                            | 2  | 3       | 4     | 5                                   | 6                             | 7            | 8     | 9  | 10  | 11   | 12  | 13    |
| 1900                         | 18,342                                       | 697     | 38·0  | 118                                 | 169·2                         | 340          | 18·5  |  |   | 18   | 358   | 19·5  |
| 1901                         | 18,515                                       | 656     | 35·4  | 139                                 | 211·8                         | 365          | 19·7  |  |   | 13   | 378   | 20·4  |
| 1902                         | 18,731                                       | 654     | 34·9  | 99                                  | 151·3                         | 294          | 15·6  |  |   | 23   | 317   | 16·9  |
| 1903                         | 18,868                                       | 633     | 33·5  | 102                                 | 161·1                         | 345          | 18·2  |  |   | 31   | 376   | 19·9  |
| 1904                         | 19,001                                       | 643     | 33·8  | 108                                 | 167·9                         | 349          | 18·3  |  |   | 34   | 383   | 20·1  |
| 1905                         | 19,179                                       | 591     | 30·8  | 82                                  | 138·7                         | 261          | 13·6  |  |   | 34   | 295   | 15·3  |
| 1906                         | 19,460                                       | 589     | 30·2  | 97                                  | 164·6                         | 317          | 16·2  |  |   | 45   | 362   | 18·6  |
| 1907                         | 19,613                                       | 615     | 31·3  | 85                                  | 138·2                         | 248          | 12·6  |  |   | 29   | 277   | 14·1  |
| 1908                         | 19,684                                       | 576     | 29·2  | 92                                  | 159·7                         | 281          | 14·2  |  |   | 46   | 327   | 16·6  |
| 1909                         | 19,730                                       | 563     | 28·5  | 100                                 | 177·6                         | 334          | 16·9  |  |   | 47   | 381   | 19·3  |
| Averages for years 1900-1909 | 19,112                                       | 622     | 32·5  | 102                                 | 164·0                         | 313          | 16·3  | 0  | 0   | 32   | 345   | 18·0  |
| 1910                         | 19,812                                       | 557     | 28·1  | 56                                  | 100·5                         | 205·         | 10·3  | 0  | 0   | 31   | 236   | 11·9  |

\* Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

By the term "Non-residents" is meant persons brought into the District on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the District on account of sickness or infirmity, and have died in public institutions elsewhere.

Area of District in acres ... 1249

|                                     |       |                      |
|-------------------------------------|-------|----------------------|
| Total population at all ages        | 18515 | } At Census of 1901. |
| Number of inhabited houses          | 3614  |                      |
| Average number of persons per house | 5·1   |                      |



**Table 2.**

LOCALITIES.

Not filled up, as there no recognized divisions  
of known population.

**Table 3.**

**Cases of Infectious Diseases Certified or Notified  
during the year.**

|  | At<br>all<br>Ages | At Ages—Years. |        |         |             |             |                  |
|--|-------------------|----------------|--------|---------|-------------|-------------|------------------|
|  |                   | Under<br>1     | 1 to 5 | 5 to 15 | 15 to<br>25 | 25 to<br>65 | 65 and<br>upw'ds |
| Diphtheria ...                             | 6                 | ..             | 4      | 2       | ...         | ...         | ...              |
| Erysipelas ...                             | 13                | 1              | 2      | 2       | ...         | 6           | 2                |
| Scarlet Fever ..                           | 19                | ...            | 8      | 10      | 1           | ...         | ...              |
| Enteric Fever ...                          | 4                 | ...            | ...    | 1       | ...         | 3           | ...              |
| Pulmonary<br>Consumption }<br>— Poor Law } | 7                 | ...            | ..     | ...     | ...         | 7           | ...              |
| Totals ..                                  | 49                | 1              | 14     | 15      | 1           | 16          | 2                |

**Cases of Non-Notifiable Infectious Diseases in same period.**

|                 | At<br>all<br>Ages | At Ages—Years. |        |         |             |             |                  |
|-----------------|-------------------|----------------|--------|---------|-------------|-------------|------------------|
|                 |                   | Under<br>1     | 1 to 5 | 5 to 15 | 15 to<br>25 | 25 to<br>65 | 65 and<br>upw'ds |
| Measles ...     | 4                 | ...            | 1      | 3       | ...         | ...         | ...              |
| Chicken Pox ... | 145               | 10             | 60     | 75      | ...         | ...         | ...              |
| Whooping Cough  | 8                 | 3              | 1      | 2       | 1           | 1           | ...              |
| Mumps ...       | 13                | ...            | 4      | 9       | ...         | ...         | ...              |
| Diarrhœa ...    | 10                | 4              | 2      | 1       | ...         | 1           | 2                |
| Influenza ...   | 1                 | ...            | ...    | ...     | ...         | ...         | 1                |

Number of beds at Small Pox Isolation Hospital ... 14.

**Table 4.****Causes of, and Ages at Death.**

| CAUSES OF DEATH.                                  | Deaths in or belonging to whole District at subjoined Ages. |              |               |                |                 |                 |                | Total Deaths in Public Institutions in the District. |
|---|---|--------------|---------------|----------------|-----------------|-----------------|----------------|--|
|   | All Ages  | Under 1 year | 1 and under 5 | 5 and under 15 | 15 and under 25 | 25 and under 65 | 65 and upwards |  |
| Small-pox ... ..                                  |   |              |               |                |                 |                 |                |  |
| Measles ... ..                                    |   |              |               |                |                 |                 |                |  |
| Scarlet Fever ... ..                              |   |              |               |                |                 |                 |                |  |
| Whooping-cough ... ..                             | 2   | 1            | 1             |                |                 |                 |                |  |
| Diphtheria and Membranous }<br>Croup ... ..       | 1   |              | 1             |                |                 |                 |                |  |
| Croup ... ..                                      |   |              |               |                |                 |                 |                |  |
| Fever { Typhus ... ..                             |   |              |               |                |                 |                 |                |  |
| Enteric ... ..                                    |   |              |               |                |                 |                 |                |  |
| Other continued ... ..                            |   |              |               |                |                 |                 |                |  |
| Epidemic Influenza ... ..                         | 1   |              |               |                |                 |                 | 1              |  |
| Cholera ... ..                                    |   |              |               |                |                 |                 |                |  |
| Plague ... ..                                     |   |              |               |                |                 |                 |                |  |
| Diarrhœa ... ..                                   | 5   | 3            | 2             |                |                 |                 |                |  |
| Enteritis ... ..                                  | 4   | 1            | 1             | 1              |                 |                 | 1              |  |
| Gastritis ... ..                                  |   |              |               |                |                 |                 |                |  |
| Puerperal Fever ... ..                            |   |              |               |                |                 |                 |                |  |
| Erysipelas ... ..                                 |   |              |               |                |                 |                 |                |  |
| Other Septic Diseases ... ..                      | 2   |              |               |                |                 | 1               | 1              |  |
| Phthisis ... ..                                   | 14  |              |               |                |                 | 14              |                |  |
| Other Tubercular Diseases ... ..                  | 9   | 3            | 3             | 3              |                 |                 |                |  |
| Cancer, malignant disease ... ..                  | 7   |              |               |                |                 | 6               | 1              |  |
| Bronchitis ... ..                                 | 30  | 5            | 3             |                | 2               | 9               | 11             |  |
| Pneumonia ... ..                                  | 11  | 4            | 2             |                |                 | 2               | 3              |  |
| Pleurisy ... ..                                   | 1   |              |               |                | 1               |                 |                |  |
| Other Diseases of Respiratory }<br>Organs ... ..  | 1   |              | 1             |                |                 |                 |                |  |
| Alcoholism ... ..                                 | 5   |              |               |                |                 |                 |                |  |
| Cirrhosis of Liver ... ..                         |   |              |               |                |                 | 5               |                |  |
| Venereal Diseases ... ..                          |   |              |               |                |                 |                 |                |  |
| Premature Birth ... ..                            | 15  | 15           |               |                |                 |                 |                |  |
| Diseases and Accidents of }<br>Parturition ... .. | 2   |              |               |                |                 | 2               |                |  |
| Heart Diseases ... ..                             | 15  |              |               |                |                 | 11              | 4              |  |
| Accidents ... ..                                  | 7   |              | 3             | 2              |                 | 1               | 1              |  |
| Suicides ... ..                                   | 1   |              |               |                |                 | 1               |                |  |
| All other causes ... ..                           | 103   | 26           | 4             | 1              | 2               | 28              | 42             |  |
| All causes ... ..                                 | 236   | 58           | 21            | 7              | 5               | 80              | 65             | 0  |



**Table 5.**  
**INFANTILE MORTALITY.**  
**Deaths from stated Causes in Weeks and Months under One Year of Age.**

| CAUSE OF DEATH.                   |   |   |    | Under 1 Week. | 1-2 Weeks | 2-3 Weeks, | 3-4 Weeks | Total under<br>1 Month. | 1-2 Months. | 2-3 Months. | 3-4 Months. | 4-5 Months, | 5-6 Months. | 6-7 Months. | 7-8 Months. | 8-9 Months. | 9-10 Months. | 10-11 Months. | 11-12 Months. | Total Deaths<br>under<br>One Year. |
|-----------------------------------|---|---|----|---------------|-----------|------------|-----------|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|------------------------------------|
| ALL<br>CAUSES.                    | { | Certified ... ..                                | 16 | 3             | 3         | 1          | 23        | 8                       | 3           | 4           | 5           | 2           | 4           | 0           | 0           | 1           | 4            | 3             | 57            |                                    |
|                                   |   | Uncertified ... ..                              | 1  |               |           |            | 1         |                         |             |             |             |             |             |             |             |             |              |               | 1             |                                    |
| Common<br>Infectious<br>Diseases. | { | Small-pox ... ..                                |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Chicken-pox ... ..                              |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Measles ... ..                                  |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Scarlet Fever ... ..                            |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Diphtheria: Croup ... ..                        |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   | { | Whooping Cough ... ..                           |    |               |           |            |           |                         |             |             |             |             |             | 1           |             |             |              |               |               | 1                                  |
| Diarrhœal<br>Diseases.            | { | Diarrhœa, all forms ... ..                      |    |               |           |            |           | 1                       |             | 2           |             |             |             |             |             |             |              |               |               | 3                                  |
|                                   |   | Enteritis<br>(not Tuberculous) }                |    |               |           |            |           |                         | 1           |             |             |             |             |             |             |             |              |               |               | 1                                  |
|                                   |   | Gastritis, Gastro-<br>intestinal Catarrh }      |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
| Wasting<br>Diseases.              | { | Premature Birth ... ..                          | 10 | 2             | 1         | 1          | 14        | 1                       |             |             |             |             |             |             |             |             |              |               |               | 15                                 |
|                                   |   | Congenital Defects ... ..                       | 1  | 1             |           |            | 2         |                         |             |             |             |             |             |             |             |             |              |               |               | 2                                  |
|                                   |   | Injury at Birth ... ..                          |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Want of Breast-milk ... ..                      |    |               |           |            |           | 1                       | 1           |             |             |             |             |             |             |             |              |               |               | 2                                  |
|                                   |   | Atrophy, Debility,<br>Marasmus }                | 5  |               | 1         |            | 6         | 4                       |             | 2           | 3           |             | 1           |             |             |             |              |               |               | 16                                 |
| Tuberculous<br>Diseases.          | { | Tuberculous Meningitis...                       |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Tuberculous Peritonitis:<br>Tabes Mesenterica } |    |               |           |            |           |                         | 1           |             |             |             |             |             |             |             |              | 1             |               | 2                                  |
|                                   |   | Other Tuberculous<br>Diseases }                 |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              | 1             |               | 1                                  |
|                                   |   | Erysipelas ... ..                               |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Syphilis ... ..                                 |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Rickets ... ..                                  |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Meningitis<br>(not Tuberculous) }               |    |               |           |            |           |                         |             |             |             | 1           |             |             |             |             |              |               |               | 1                                  |
|                                   |   | Convulsions ... ..                              |    |               |           |            |           |                         | 1           |             |             |             |             |             |             |             |              | 1             | 1             | 3                                  |
|                                   |   | Bronchitis ... ..                               |    |               |           |            |           |                         |             |             |             | 1           | 1           | 1           |             |             |              | 1             | 1             | 5                                  |
|                                   |   | Laryngitis ... ..                               |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Pneumonia ... ..                                |    |               |           |            |           |                         |             |             |             |             | 1           | 1           |             |             | 1            |               | 1             | 4                                  |
|                                   |   | Suffocation, overlaying                         |    |               |           |            |           |                         |             |             |             |             |             |             |             |             |              |               |               |                                    |
|                                   |   | Other Causes ... ..                             | 1  |               | 1         |            | 2         |                         |             |             |             |             |             |             |             |             |              |               |               | 2                                  |
|                                   |   |   |    | 17            | 3         | 3          | 1         | 24                      | 8           | 3           | 4           | 5           | 2           | 4           | 0           | 0           | 1            | 4             | 3             | 58                                 |

|                    |   |                     |     |     |     |   |     |     |     |     |     |     |     |       |
|--------------------|---|---------------------|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|-------|
| Births in the year | { | Legitimate          | ... | ... | 542 | Population  | ... | ... | ... | ... | ... | ... | ... | 19812 |
|                    |   | Illegitimate        | ... | ... | 15  |   |     |     |     |     |     |     |     |       |
| Deaths in the year | { | Legitimate infants  | ... |     | 57  | Deaths from all causes—inclusive of those in public |     |     |     |     |     |     |     | 236   |
|                    |   | Illegitimate infant | ... |     | 1   | institutions outside district                       | ... | ... | ... |     |     |     |     |       |



**Table 6.**

**Summary of Work by Inspector of Nuisances  
partly under my supervision.**

|   | Inspections made. | Informal Notices. | Formal Notices. | Number of Nuisances | Nuisances abated<br>after<br>Informal Notice. | Nuisances abated<br>after<br>Formal Notice. | Prosecutions. |
|---|-------------------|-------------------|-----------------|---------------------|---|---|---------------|
| Dwelling Houses and Schools } Foul Conditions ... | 762               | 26                | ...             | 28                  | 14  | ...   | 1             |
| } Structural Defects ...                          |                   | 84                | 3               | 93                  | 46  | 2   |               |
| } Overcrowding ...                                |                   | 34                | ...             | 34                  | 29  | ...   |               |
| } Unfit for Habitation                            |                   | 3                 | ...             | 13                  | ...   | ...   |               |
| Dairies, Milkshops and Cowsheds                   | 57                | 6                 | ...             | 6                   | 6   | ...   |               |
| Bakehouses  | 62                | 5                 | ...             | 5                   | 5   | ...   |               |
| Other Workshops and Factories...                  | 282               | 21                | ...             | 34                  | 25  | ...   |               |
| Slaughter-houses                                  | 354               | 3                 | ..              | 3                   | 3   | ...   |               |
| Ashpits and Privies                               | 522               | 54                | 13              | 54                  | 16  | 9   | 1             |
| Deposits of Refuse and Manure                     | 98                | 30                | 1               | 30                  | 24  | 1   |               |
| Water Closets                                     | 115               | 49                | 6               | 49                  | 22  | 6   |               |
| House } Defective Traps ...                       | 2                 | 2                 | 2               | 2                   | ...   | 2   |               |
| Drainage } No Disconnection...                    | 10                | 2                 | ...             | 2                   | 2   | ...   |               |
| } Other Faults ..                                 | 180               | 89                | 7               | 89                  | 41  | 7   |               |
| Water Supply                                      | 9                 | 2                 | 1               | 2                   | 1   | 1   |               |
| Pigsties and Animals improperly kept              | 37                | 14                | ...             | 14                  | 12  | ...   |               |
| Smoke Nuisances                                   | 17                | 3                 | ...             | 3                   | 1   | ...   |               |
| Other Nuisances                                   | 59                | 35                | 2               | 35                  | 12  | 2   |               |

|   |     |     |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|-----|-----|
| Seizures of Unwholesome Food  | ... | ... | ... | ... | ... | ... | 3   |
| Condemned as Unfit for Food   | ... | ... | ... | ... | ... | ... | 3   |
| Samples of Water taken for Analysis   | ... | ... | ... | ... | ... | ... | 0   |
| ,,      ,,      condemned as unfit for use                                  | ... | ... | ... | ... | ... | ... | 0   |
| Lots of Infected Bedding Disinfected  | ..  | ... | ... | ... | ... | ... | 324 |
| Houses Disinfected after Infectious Disease                                 | ... | ... | ... | ... | ... | ... | 41  |
| Schools Disinfected   | ... | ... | ... | ... | ... | ..  | 0   |
| Formal Notices in 1909, complied with in 1910                               | ... | ... | ... | ... | ... | ... | 6   |
| ,,      ,,      ,,      not yet complied with                               | ... | ... | ... | ... | ... | ... | 3   |
| ,,      ,,      1910,      ,,      ,,      but nuisances about to be abated | ... | ... | ... | ... | ... | ... | 5   |



**Table 7.**

|   |   |     |
|---|---|-----|
| Certificates issued to Elementary School Teachers | } | 182 |
| advising exclusion of Scholars from infected      |   |     |
| houses for specified periods during the year      |   |     |

**Table 8.****Abstract of Particulars asked for by Home Office.**

|  |         |     |      |            |     |     |
|--|---------|-----|------|------------|-----|-----|
| Factories—Inspections                                  | ...     | ... | 60.  | Notices    | ... | 2   |
| Workshops—Inspections                                  | ...     | ... | 284. | ,,         | ... | 4   |
| Homeworkers' Premises—Inspections                      | ...     | ... | 38.  | ,,         | ... | 0   |
| Defects found ;  |         |     |      |            |     |     |
| Want of Cleanliness                                    | ...     | ... | 21.  | Remedied   | ... | 17  |
| Other Nuisances  | ...     | ... | 8.   | ,,         | ... | 6   |
| Defective or Unsuitable Sanitary Accommodation         | }       |     | 2.   | ,,         | ... | 1   |
| Breach of Sanitary requirements in Bakehouses          | }       |     | 9.   | ,,         | ... | 0   |
| Other offences   | ...     | ... | 0.   | ,,         | ... | 0   |
| OTHER MATTERS :—                                       |         |     |      |            |     |     |
| Notified by H.M. Inspector                             | ...     | ... | ...  | ...        | ... | 23  |
| Reports to H.M. Inspector                              | ...     | ... | ...  | ...        | ... | 0   |
| Underground Bakehouses in use                          | ...     | ... | ...  | ...        | ... | 0   |
| HOMEWORK :—  |         |     |      |            |     |     |
| Lists received   | } once  |     | 14.  | Outworkers | ... | 50  |
|  | } twice |     | 18.  | ,,         | ... | 131 |
| Addresses forwarded to other Councils                  | ...     | ... | ...  | ...        | ... | 48  |
| Addresses received from other Councils                 | ...     | ... | ...  | ...        | ... | 3   |
| WORKSHOPS ON REGISTER AT END OF 1910—354. OCCUPIED—299 |         |     |      |            |     |     |
| Chief Trades therein :                                 |         |     |      |            |     |     |
| Lock, Key and Latch Manufacture                        | ...     | ... | ...  | ...        | ... | 167 |
| File-cutting   | ...     | ... | ...  | ...        | ... | 10  |
| Other Hardware Manufacture                             | ...     | ... | ...  | ...        | ... | 12  |
| Articles of Dress                                      | ...     | ... | ...  | ...        | ... | 17  |
| Workers in Wood and Iron                               | ...     | ... | ...  | ...        | ... | 43  |
| Bakehouses   | ...     | ... | ...  | ...        | ... | 19  |
| Sundry Trades  | ...     | ... | ...  | ...        | ... | 31  |
| Void—General Trades                                    | ...     | ... | ...  | ...        | ... | 50  |
| Void—Bakehouses  | ...     | ... | ...  | ...        | ... | 5   |

Factories on Register—55.

Occupied—55.

